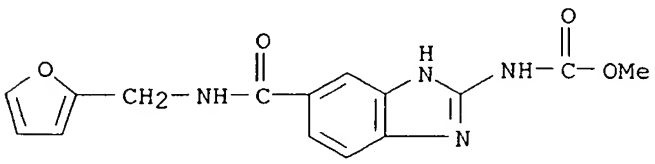
09/676,033

DOCUMENT NUMBER: 108:37831
TITLE: A process for the synthesis of alkyl 5-carboxamidobenzimidazole-2-carbamates as anthelmintics.
INVENTOR(S): Kumar, Shiv; Bhaduri, Amiya Prashad; Visen, Pradeep Kumar Singh; Ram, Shive; Katiyar, Jagdish Chandra; Gupta, Suman; Sen, Amiya Bushan
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: Indian, 7 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 159210	A	19870411	IN 1982-DE22	19820111

IT **89791-21-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as anthelmintic)
RN 89791-21-9 CAPLUS
CN Carbamic acid, [5-[[(2-furanylmethyl)amino]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2001 ACS
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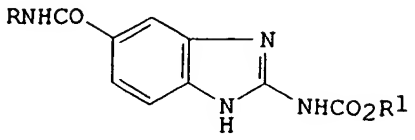

I

AB The title compds. [I; R = alkyl, such as Me, aryl, such as 2-furylmethyl, (un)substituted Ph; R1 = alkyl, such as Me, Et] were prepd. as anthelmintics (no data) by converting 3,4-O2N(AcNH)C6H3CO2H (II) to its acid chloride and amidating with RNH2, deacetylating, reducing to an o-phenylenediamine, and treating this latter with ClCO2R1 and H2NC(:NH)SMe.H2SO4 (III). II was carried through the process steps, including amidation with 2-furanmethanamine and cyclocondensation with ClCO2Me and III to give II (R = 2-furylmethyl, R1 = Me). The yields for the steps were 95, 78, 70, and 40%, resp.

ACCESSION NUMBER: 1988:37831 CAPLUS

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